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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/690,446

10/21/2003

Jie Liang

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TEXAS INSTRUMENTS INCORPORATED  
P O BOX 655474, M/S 3999  
DALLAS, TX 75265

EXAMINER

TSE, YOUNG TOI

ART UNIT

PAPER NUMBER

2611

NOTIFICATION DATE

DELIVERY MODE

07/21/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/690,446	<b>Applicant(s)</b> LIANG, JIE	
	<b>Examiner</b> YOUNG T. TSE	<b>Art Unit</b> 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7,9-11,13-15 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,5-7,9 and 21 is/are allowed.
- 6) ☒ Claim(s) 10,11,13-15 and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see pages 7 and 8, filed April 25, 2008, with respect to the rejection under 35 U.S.C. 102(e) have been fully considered and are persuasive. The rejection of claims 1-3, 5-7, 9 and 21 has been withdrawn.
2. Applicant's arguments filed April 25, 2005 have been fully considered but they are not persuasive.

#### **Argument:**

Applicant argues that the independent claim 1 recites, in part, "a first receiver path for decoding a preamble to a wireless data packet and a second receiver path for decoding a data packet payload." Independent claims 10 and 18 recite similar limitations. However, the cited reference Gorday fails to teach or suggest this combination of limitations.

#### **Response:**

The examiner agrees with Applicant's argument that Gorday fails to teach or suggest this combination of limitations stated in the argument above related to the independent claim 1, as well as the independent claim 21. However, the examiner respectfully disagrees with the Applicant that independent claims 10 and 18 recite similar limitations of independent claim 1.

Independent claim 10 recites a first analog front end and a second analog front end to receive a data packet, but nowhere in claim 10 recites "the first analog front end

for decoding a preamble to a wireless data packet and the second analog front end for decoding a data packet payload” as argued in the independent claim 1.

Independent claim 18 recites a method for receiving data packets in a wireless receiver comprising a step of “decoding signals received through a first receiver path to detect a code in a preamble of a received data packet”, which clearly is different than Applicant’s argument that “the first receiver path for decoding the preamble to the wireless data packet” and does not recite “a second receiver path for decoding a data packet payload”. Gorday teaches that the Frequency Synchronization Burst (FSB) format for the IEEE 802.15.4 standard which contains a preamble 602, a start-of-frame delimiter 604, and a header 606 shown in Figure 6 transmitted by the transmitter 204 is later decoded by the receiver 206. Paragraph [0051], lines 11-23 and paragraph [0055], lines 1-37.

Therefore, in response to applicant's argument that the reference Gorday fails to show certain features of applicant's invention, it is noted that the features upon which applicant relies are not recited in the rejected claims 10 and 18. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Drawings***

3. The drawings are objected to because the antennas “10” and “30” shown in Figures 1 and 2 are labeled as antennas, instead of upward arrows in general for signal

flows. Applicant is suggested to use antenna symbol to label the reference signs "10" and "30". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 10-11, 15 and 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Gorday et al. (U.S. Publication No. 2005/0074036 A1, hereinafter "Gorday").

Gorday discloses a wireless communication system in Figure 1 for frequency offset compensation. In the communication system, transceivers 102 and 104 exchange data over a wireless medium and communicate with other application devices 106, 108, 110, and 112.

Fig. 2 shows a block diagram of a transceiver 102 or 104 with a single application device 106 comprising a controller 202, a transmitter 204, a receiver 206, an interface port 208, and a frequency reference 210.

Figure 3 shows a block diagram of the transmitter 204 of the transceiver of Figure 2.

Figure 4 shows a block diagram of the receiver 206 of the transceiver of Figure 2.

Figure 5 applies to a broadcast scenario in which a primary communication device, like a transmitter, is sending data packets to multiple secondary communication devices.

Figure 6 shows a possible Frequency Synchronization Burst (FSB) format for the IEEE 802.15.4 standard which contains a preamble 602, a start-of-frame delimiter 604, and a header 606.

Regarding claims 10 and 18, the wireless communication system or transceiver comprises the controller 202 controls the receiver 206 having a first receiver path or

front end (a low power sleep mode) for decoding a preamble to a wireless data packet and a second receiver path or front end (active mode) for decoding a data packet payload, the controller 202 also functions as a packet detection logic to identify data packets directed to the receiver and functions as a switching logic to select the first receiver path (or the first front end) or the second receiver path (or the second front end) depending on whether the data packet has identified a data packet directed to the receiver, wherein the low power sleep mode has a lower decoding resolution than the active mode since the preamble or FSB is a small data packet containing the information about its relative position with respect to the associated payload data packets. See paragraphs [0013]; [0036]; [0041]; [0051]; [0053]; [0055]; [0057]; and [0059], last 5 lines.

Regarding claims 11 and 20, clearly, the first receiver path or front end (low power sleep mode) requires less power to operate than the second receiver path or front end (active mode).

Regarding claim 15, although Gorday does not explicitly teach the first receiver path uses a specific barker-code detection to decode the preamble of the data packet, it is well known to a person skill in the to know any kind of coding detection could be used to decode the preamble of the data packer, including the barker-code detection since a barker code is one of many coding techniques. It also described in paragraph [0014] of the prior art Figure 1 of the instant application.

Regarding claim 17, the controller 202 also functions to select the low power sleep mode until a data packet is identified and then select the active mode to decode the data packet payload.

Regarding claim 19, the controller 202 switches back to the low power sleep mode when receiving of the data packet payload is completed.

### ***Allowable Subject Matter***

6. Claims 1-3, 5-7, 9 and 21 are allowed.
7. Claims 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of



the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is 571- 272-3051. The examiner can normally be reached on Monday-Friday 10:00-6:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on 571- 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YOUNG T. TSE/  
Primary Examiner, Art Unit 2611